



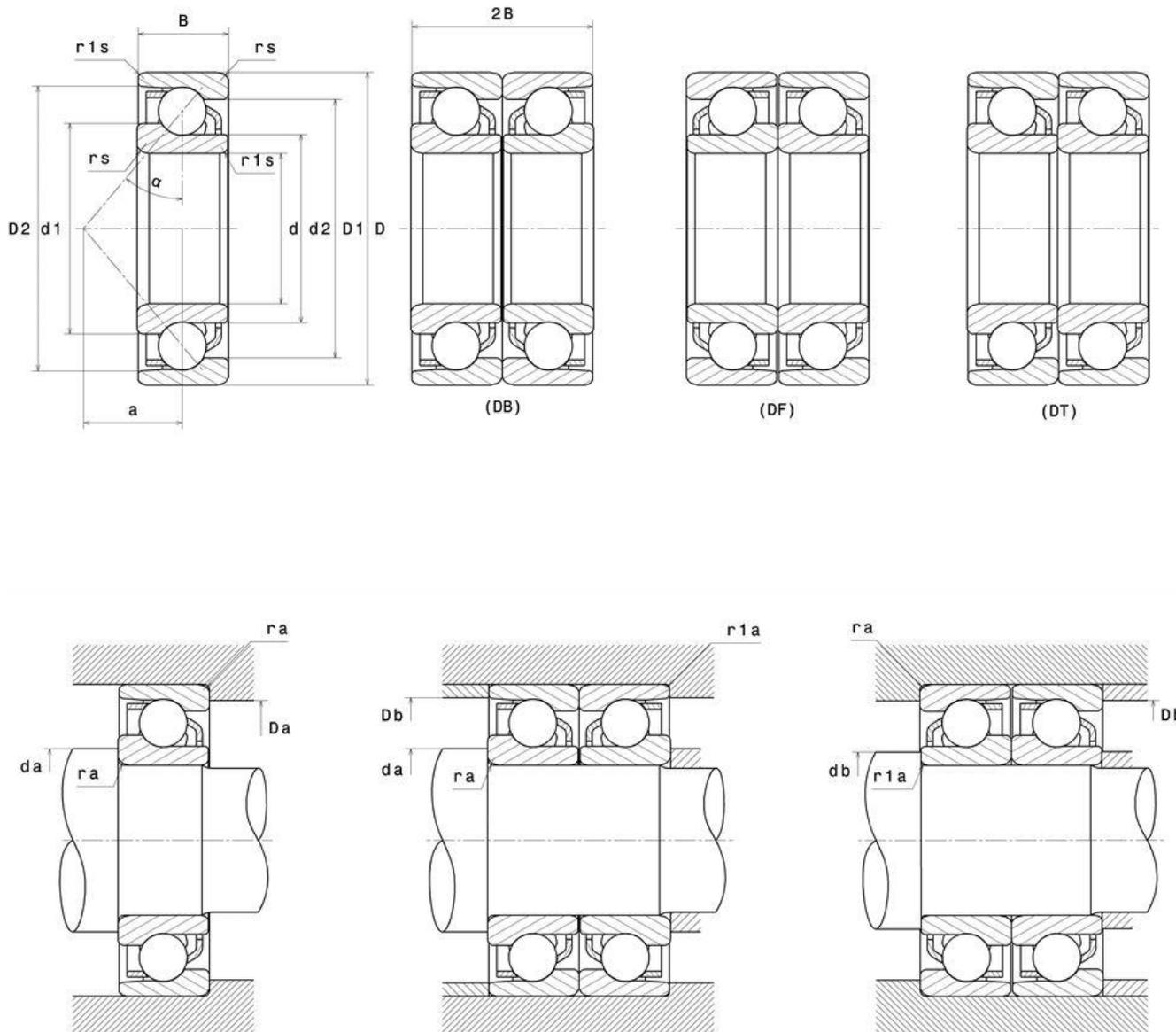
Technical data

7303B

Single row or matched pairs of angular contact ball bearings

Angular contact ball bearings, pressed steel cage

VISUAL (S)



7303B

Single row or matched pairs of angular contact ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	17 mm
D - External diameter	47 mm
B - Bearing/Inner ring width	14 mm
a - Charge load application point	20,5 mm
- Contact angle	40 °
rs - Min fillet radius	1 mm
r1s - Min fillet radius	0,6 mm
Radial clearance class	CN
Mass	0,109 kg

PRODUCT PERFORMANCE

C - Dynamic load	16400000 mN
C0 - Static load	8050000 mN
Cu - Fatigue limit load	630000 mN
N lim - Oil lubrication limit speed	120000 °/s
N lim - Grease lubrication limit speed	90000 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	22,5 mm
db min - Min IR shoulder diameter	21,5 mm
Da max - Max shoulder diameter OR	41,5 mm
Db max - Max OR shoulder diameter	42,5 mm



NTN Europe

1 rue des Usines · BP 2017 · 74010 Annecy Cedex · France · Tel. +33 (0)4 50 65 30 00
S.A. au capital de 322 639 919 € · RCS ANNECY B 325 821 072 · Id. Fiscale : FR 48 325 821 072
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ABUTMENT

r1a - Max fillet radius	0,6 mm
ra max - Max shaft & housing fillet radius	1 mm

INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

	e	Single or DT bearing arrangement				DB or DF arrangement			
		Fa / Fr ≤ e		Fa / Fr > e		Fa / Fr ≤ e		Fa / Fr > e	
		X	Y	X	Y	X	Y	X	Y
30°	0.8	1	0	0.9	0.76	1	0.78	0.63	1.24
40°	1.14			0.35	0.57		0.55	0.57	0.93

Equivalent static radial load

$$P_0 = X_0.F_r + Y_0.F_a$$

a	Single or DT bearing arrangement		DB or DF arrangement	
	X ₀	Y ₀	X ₀	Y ₀
30°	0.5	0.33	1	0.66
40°		0.26		0.52

For single or DT bearing arrangement :

If $P_0 < F_r$, then use $P_0 = F_r$



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